RESEARCH HIGHLIGHTS

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IMPACT OF THE HOME BUYERS' PLAN ON HOUSING DEMAND

Introduction

The Home Buyers' Plan (HBP) was introduced in February 1992. The HBP is aimed at facilitating access to homeownership by allowing households to withdraw up to $20,000 tax free from their Registered Retirement Saving Plans (RRSPs) to cover the down payment for the home. Such withdrawals must be repaid through a series of annual payments equal to 1/15 of the amount withdrawn over a maximum period of 15 years. Should households fail to make the required repayment, they must add the amount in default to their taxable income.

This tax measure is very popular. Between its introduction and 1998, the HBP has enabled over 777,000 individuals to withdraw close to $7.5 billion from their RRSPs to finance the purchase of their first home and, in 1998, just over 111,000 households withdrew an average amount of $9,400. However, no one has yet developed a stringent analysis or an adequate modelling of the advantages and drawbacks of the HBP. This issue is all the more important in that the behaviour of the participants in the plan is quite varied. In fact, despite the growing popularity of the HBP, it can be seen that a significant proportion of participants do not make the full repayment required into their RRSPs according to the terms of the HBP. The purpose of this study is to analyze the impact of the HBP.

Methodology

First, the study explains the popularity of this program, showing the potential financial gain. This analysis identifies those households who gain the most from this program. Then, the research studies how saving and consumption decisions are modified by the HBP. The analysis is theoretical and makes use of a housing demand model based on a continuous-time life-cycle analysis. This model was initially applied to housing demand by Artle and Varaiya (1978) and subsequently used by Wheaton (1985) in the United States and Fortin (1988) in Canada, among others.

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Main Findings

1. Effect of the HBP on Wealth

A calculation was made of the value accumulated by a household participating in the HBP at the end of the period planned for the repayment of the funds into the RRSP and this value was compared to that of a household not taking part in the program. This comparison was made for several cases, derived from: whether or not the household has to borrow to contribute to the RRSP before making the withdrawal under the HBP, whether or not the household has to borrow to repay the RRSP after the initial withdrawal, or else assuming that the household does not repay the funds into the RRSP and sustains the tax penalty stipulated under the program. In all cases, the findings are unequivocal. The HBP provides households with a net financial gain. The interpretation of this gain is very simple. By allowing households to make a tax-free withdrawal of an amount that gave them a tax credit when it was contributed, governments are implicitly granting these households an interest-free loan equal to the amount of tax to which the withdrawal should normally have been subject. This loan remains in effect until the date on which the funds (that is, 1/15 of the amount every year) must be repaid into the RRSP.

The increase in the accumulated value caused by the HBP depends on several factors: the interest rate, the tax rate, the inflation rate, the initial withdrawal amount, whether or not the household borrows to contribute to the RRSP or to make the repayments and, lastly, whether or not the household makes the repayments. The gain is greater if the repayments to the RRSP, on which the return is taxed only at the time of the final withdrawal, can be made using assets on which the return is taxed annually. The least favourable case is where the household must borrow to contribute to the RRSP and to make the repayments required under the HBP, as the interest paid on these borrowings is not deductible. The present value of the financial gain is then equal to the tax rate multiplied by the initial withdrawal from the RRSP. The HBP is therefore more profitable to those households with the highest tax rate. In fact, a household which has a marginal tax rate of 40 per cent and makes the maximum withdrawal of $20,000 benefits from a wealth gain with a present value of at least $8,000.

2. Impact of the HBP on Housing Demand and Saving

In order to study the effect of the HBP on consumption, saving and housing demand choices, the study looked first at how RRSPs modified the decisions. RRSPs are an integral part of the HBP but were never previously introduced in the theoretical life-cycle models. Without RRSP assets, the theoretical model comprises two types of assets; that is, liquid assets on which the return is continually taxed and the net value of the home that accrues tax free. The model has a terminal date on which the home is sold and the net value of the home is converted into liquid assets. The study introduced RRSPs into the model by adding a third type of asset for which the conversion into liquid assets is immediately taxable but the return is taxed only at the time of the withdrawal. These assets are also converted into liquid assets at the end of the plan.

The main impact of the RRSP is that the relevant rate of return for the saving decision becomes the before-tax real rate of return rather than the after-tax real rate of return. This change increases the cost of housing services, as the implicit foregone return on the equity in the home is the rate of return on the best competitive investment. The study shows that, if households can save money in their RRSPs, it is optimal not to hold any liquid assets. The addition of the HBP is done by introducing the possibility of converting tax free a sum that was originally in the RRSP assets, in order to reduce the initial mortgage. This withdrawal is then repaid with a constant equal flow that is taken from the liquid assets and that continues until the withdrawal has been fully repaid into the RRSP. Without limiting the generality of the analysis, the date on which the withdrawal is fully repaid into the RRSP was made to coincide with the date on which the mortgage is fully repaid.

The study identified the following effects of the HBP. First, as discussed above, the wealth of households is increased. Households use the gain in their wealth to increase their consumption of other goods and housing in the same proportion. These increases in consumption and housing demand are also proportional to the lifetime gain in their wealth and also come with a proportional increase in terminal wealth. The total saving of the household therefore rises during the period when it is an owner. In fact, the sometimes expressed opinion that households use the HBP to buy a home of greater value is founded. However, this is never done to the detriment of saving.

Finally, if the model allowed households not to repay the funds into their RRSPs and rather to pay the tax on the contribution amount in default, the decision to repay or not would come down to deciding to save or not at the before-tax real interest rate. In fact, it may be optimal for households with a high time preference rate to participate in the program in order to take advantage of the wealth gain without necessarily repaying the funds into their RRSPs.

Project Manager: Ian Melzer

Research Consultants: Frédéric Chartrand and Mario Fortin, Economics Department, Université de Sherbrooke

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Canada Mortgage and Housing Corporation
700 Montreal Road
Ottawa, Ontario
K1A 0P7

Phone: 1 800 668-2642
Fax: 1 800 245-9274

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